

## CLAIMS

1. A communication control apparatus comprising:
  - a detection section that detects at least one of
  - 5 a radio environment or a network environment;
  - a management section that stores a detected radio environment or network environment, and monitors whether or not a change has occurred in said radio environment or said network environment; and
  - 10 a control section that performs application communication service control when a change has occurred in said radio environment or said network environment.
2. The communication control apparatus according to
- 15 claim 1, wherein:
  - said management section monitors environment changes in a lower layer than a transport layer in an OSI (Open System Interconnection) hierarchical model; and
  - 20 said control section performs communication service control by means of an application layer in accordance with an environment change in a lower layer than said transport layer.
- 25 3. The communication control apparatus according to claim 1, wherein said control section comprises:
  - a determination section that determines which environment has changed of a radio environment of radio

communication performed by said communication control apparatus and a network environment to which said communication control apparatus belongs; and

5 a decision section that decides on a control operation for changing service when a change of said radio environment or said network environment satisfies a predetermined condition.

4. The communication control apparatus according to  
10 claim 3, wherein said determination section determines whether or not any one of a network to which said communication control apparatus belongs, field intensity, a user-specified item, or a modulation scheme has changed.

15 5. The communication control apparatus according to claim 3, wherein said decision section changes operation relating to any one of service quality in network transmission, signaling information transmission/reception, or transmit data  
20 transmission/reception.

6. The communication control apparatus according to claim 3, wherein:

25 said control section changes further comprises a notification section that, when negotiation with a communicating station is necessary, notifies said communicating station that a call involving said communicating station is to be updated; and

said decision section decides on a control operation after a call has been updated.

7. A communication terminal apparatus comprising the  
5 communication control apparatus according to claim 1.

8. A server apparatus comprising the communication control apparatus according to claim 1.

10 9. A communication control method comprising:  
a step of detecting at least one of a radio environment or a network environment;  
a step of storing a detected radio environment or network environment and monitoring whether or not a change  
15 has occurred in said radio environment or said network environment; and  
a step of performing application communication service control when a change has occurred in said radio environment or said network environment.